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To: Federal Communications Commission

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Subject: Comments for NPRM on Broadband over Power Line, ET 04-37

My Credentials

My BSEE is from Newark College of Engineering (now New Jersey Institute of Technology) class of 1949. For the first 10 years of my career I worked on electromagnetic compatibility problems in the aerospace industry. During that time I was publisher of the Proceedings of the Electromagnetic Compatibility Group of the IEEE. For the next 30 years I was active in marketing new technology for industrial and commercial applications. The most important task was finding the "Fatal Flaw" in a new technology that aggressive entrepreneurs often overlook because they could only see the "Hot Buttons" that would have assured success..

I was first license in 1947 as W2UUH and now hold the Extra Class license as W2UH. During the 1950's when TVI was the bane of ham radio I wrote an article for QST, the official journal of ARRL, "Is your rig RF tight." Since then I have solved every interference problem caused by my ham operations. Most of my amateur radio activity is managing the local Radio Amateur Civil Emergency Service (RACES) and Amateur Radio Emergency Service (ARES).

BPL's Hot Button and Fatal Flaw

The economics of BPL are very compelling, so I clearly understand the FCC's and BPL vendors' enthusiasm for this Hot Button, an inexpensive mode for delivering broadband service on existing infrastructure. But I believe its overlooked Fatal Flaw is ***interference to BPL from even modest amateur radio stations.***

My specific example

Reports in QST on tests in Virginia showed that a 100 W mobile signal interfered with BPL from a half mile away. I regret that I have not heard of any tests by BPL vendors of their systems' susceptibility such signals.

I operate a modest HF station in a densely populated community in 25 miles west of New York City. My transceiver is the Kenwood TS-850, with maximum output of 100 W. For the 3.5 to 4.0 MHz and 7.0 to 7.3 MHz bands I use a 135 ft dipole fed with ladder

line through an antenna tuner. It also works on all amateur bands up to 29.7 MHz. In addition I use three parallel dipoles, fed directly by coax, for the 14.0 to 14.35 MHz, 21.0 to 21.45 MHz and 28.0 to 29.7 MHz bands.

There are at least 400 households within a half mile of my station, including 200 apartments within a quarter mile. Because of my enthusiasm for emergency communications, I always enter the Field Day contest on the last full weekend in June from my home. Typically I operate for 6 to 10 hours, switching among the bands mentioned above as propagation conditions change. Assuming only 25% of the households have BPL service, Jersey Central Power and Light, the local electric power distributor, will have 100 very unhappy customers.

Required tests

As a minimum, the FCC should require BPL vendors to also run tests of susceptibility to amateur signals. I feel strongly this is the overlooked Fatal Flaw of BPL.